

**ASCE-INDOT
STRUCTURAL SUBCOMMITTEE
MEETING NO. 33 MINUTES
July 6, 2006**

The meeting was called to order at 9:05 am by Steve Weintraut. Those in attendance were:

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| Tony Uremovich | INDOT, Structural Services |
| Naveed Burki | INDOT, Structural Services |
| Bill Dittrich | INDOT, Program Development |
| Keith Hoernschmeyer | Federal Highway Administration |
| Mike Obergfell | USI Consultants, Inc. |
| Mike Wenning | American Consulting |
| Steve Weintraut | Butler, Fairman and Seufert, Inc. |
| Michael Matel | Butler, Fairman and Seufert, Inc. |

In addition to the attendees, these minutes will be sent to the following:

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| Anne Rearick | INDOT, Structural Services |
| Greg Klevitsky | INDOT, Structural Services |
| George Snyder | INDOT, Design Division |
| Chris Hill | Prestress Services |
| Tony Zander | INDOT, Materials and Tests Division |
| Mike McCool | Beam Longest & Neff, LLC. |
| Dick O'Connor | RQAW Corporation |
| Jason Yeager | Gohman Asphalt Company |

A meeting agenda had previously been distributed and the following items were discussed:

1. The March 16, 2006 meeting minutes were approved.
2. Dave McDougall of HNTB Corporation, who attended the last meeting, has requested to become a member of this group. Since some members of the group were not present, it is asked that all members e-mail their thoughts on this matter to Mike Matel by August 15, 2006.
3. In August 2004 a draft report on jointless bridges was issued as part of the Joint Transportation Research Program. Mike Wenning stated that the final version of this report was issued this spring. Recommendations in this report dealt with minimum pile lengths with their relationship to bridge length limits for integral end bent structures. It was stated that by wrapping the piles with styrofoam at the end bents, the bridge length limits for these integral structures could be increased. The report only addressed structures which had skews of less than 30 degrees. Phase 2 of this report, which may begin this summer, will investigate structures with skews greater than 30 degrees.

After the meeting was concluded, all the members received an e-mail with the link to the final version of this report. All committee members are asked to review this report before the next meeting. It is hoped that the committee can come to a consensus at the next meeting to act on the recommendations, which are contained in this report.

4. Currently, there are no set limits for semi-integral end bent structures. Many members of this group felt that the bridge length limits for this type of structure could be increased in comparison to integral end bents structures. It was also felt that greater skew values could be implemented with semi-integral end bent structures. It was pointed out that the biggest advantage of using semi-integral end bent structures was the elimination of the joint at the end of the bridge floor. Steve Weintraut will contact Professor Frosch of Purdue University and invite him to the next meeting to discuss both integral and semi-integral end bent structures.
5. Tony Uremovich confirmed that he has received the semi-integral end bent details, which were developed by this committee. These details will be presented to the INDOT Standards Committee for approval. Tony will send out the final electronic version of these details to all members.
6. Mike Wenning asked about the status of the revised precast concrete box beam details which have been submitted to INDOT. Naveed Burki will check on this item and report back to the group.
7. The rehabilitation versus the replacement of historic bridges on low volume roads was discussed. Keith Hoernschmeyer reported that an agreement is currently being worked out between the Federal Highway Administration and the State Historic Preservation. Two flow charts were passed out (see Attachment No. 1), which went through the necessary procedures involved when evaluating "Select" and "Non-Select" bridges for rehabilitation versus replacement. It was pointed out that all "Select" bridges will be preserved even if it is determined that the structure needs to be replaced. A consultant has been hired to determine all the "Select" and "Non-Select" bridges in Indiana.

Keith also passed out a draft of the "Standards for the Rehabilitation of Historic Bridges on Low Volume Roads." (See Attachment No. 2). It was evident that economics as well as design considerations will be investigated when determining whether or not to rehabilitate the existing structure. Keith went over the various design, economic, and other criteria outlined in the attachment. Since this agreement is still being negotiated and discussed among the agencies, some of the information was left blank. Keith will keep the group informed and provide an update at the next meeting.

8. The final topic discussed was the criteria for debonding bottom strands in precast concrete beams. The current design criteria in Indiana allows for 25% of the total number of bottom strands in the beam to be debonded. Some members of the group felt that more than 25% of the bottom strands should be allowed to be debonded, if the designer would incorporate some additional things into the design at the ends of the beams such as:
 - a. extend 50% of the bottom strands into the end bent, which is similar to what is done at the pier ends; or
 - b. provide additional mild reinforcing in the ends of the beams.

It was felt that some additional analysis needed to be done before this design criteria could be revised.

Naveed Burki will discuss this topic with members of INDOT Design to determine if INDOT would be willing to consider a revised criterion allowing designers to perform a rational analysis, which would show that more than 25% of the bottom strands can be debonded. Also, Naveed will contact Purdue University about the possibility of performing some research on this topic.

The next meeting for the INDOT Structural Subcommittee is scheduled for 9:00 am on October 5, 2006, in a room to be determined.

This meeting was adjourned at 11:30AM.

Respectfully submitted,
BUTLER, FAIRMAN and SEUFERT, INC.

Michael Matel, P.E.
mmatel@bfsengr.com

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Attachments

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